

## DOCUMENT RESUME

ED 092 552

SP 008 145

TITLE Swimming and Water Safety. Grades K-12. Curriculum Bulletin No. 12, 1967-68.

INSTITUTION New York City Board of Education, Brooklyn, N.Y.

PUB DATE 68

NOTE 72p.

AVAILABLE FROM Auditor, Board of Education of the City of New York, Publications Sales Office, 110 Livingston Street, Brooklyn, N.Y. 11201 (\$2.00)

EDRS PRICE MF-\$0.75 HC Not Available from EDRS. PLUS POSTAGE

DESCRIPTORS \*Administration; \*Handicapped; Instruction; \*Instructional Programs; Safety; \*Safety Education; Skill Development; \*Swimming; Swimming Pools

## ABSTRACT

This bulletin, designed to help upgrade swimming and water safety instruction in schools, is divided into nine sections. The introductory section includes values of swimming and water safety instruction, and the scope and objectives of the program. Section two, "Organization and Administration," discusses the roles of administrators, supervisors, teachers, and swim leaders; pool operation; medical excuses; pre-session inspection of the pool; routine and emergency procedures; and programs in schools without pools. Section three, "Scope and Sequence," presents a summary of American Red Cross swimming courses and includes suggestions for the teacher and a discussion on developing skills. Section four, "Swimming Instruction for the Handicapped," includes a discussion of goals in the program and some considerations for teaching the handicapped. Section five, "Intramural Program: Girls," includes a discussion of water activities such as games, water safety aid courses, swimming meets, and synchronized swimming. Section six, "Interscholastics Program: Boys," discusses scope, coaching, facilities, the competitive swimming season, and dual swimming meets. Section seven, "Suggestions for Supervision," includes discussions on aim, motivation, warmup, class management, and review and drill. Section eight, "Evaluation of Program," discusses achievement standards. Section nine, "Appendix," includes sources of audiovisual materials, a list of equipment and supplies, and regulations. A 30-item bibliography is included. (PD)

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ED 092552

# Swimming <sup>SP</sup> and Water Safety

GRADES K-12

BOARD OF EDUCATION • CITY OF NEW YORK

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CURRICULUM BULLETIN • 1967-68 • NO. 12

APR 1 2 1974

# *Swimming and Water Safety*

GRADES K-12

BOARD OF EDUCATION • CITY OF NEW YORK

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## FOREWORD

Swimming is an all-round developmental activity as well as a survival skill in modern life. The early elimination of hazards to which nonswimmers are subject is very important, particularly in the light of the expanding interest in boating. In addition, swimming is a social asset throughout life and has value as a leisure-time activity for all age groups. Swimming is unexcelled as an activity contributing to total fitness.

Competency in this area is also invaluable for students with physical limitations. The blind student, for example, finds swimming a means of participation with his peers and derives much satisfaction and security from this wholesome activity.

The materials in this bulletin are important for organization leadership. The contents should guide the teacher and supervisor to plan effective programs of swimming instruction.

HELENE M. LLOYD  
*Acting Deputy Superintendent*

June 1967

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## ACKNOWLEDGMENTS

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We are deeply grateful to the American Red Cross, and in particular to Edmond J. Mongeon, Director of Water Safety, for permission to draw freely upon American Red Cross publications.

We wish to thank George H. Grover, Director; Clyde Cole, Supervisor; and Gerald Hase, Associate, Division of Health and Physical Education, New York State Department of Education, for their valuable assistance.

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# Introduction

For more than thirty years our teachers of swimming have used their own typewritten local courses of study. During the period 1937-1943 committees of teachers worked on a swimming syllabus. No officially approved document, either printed or mimeographed, however, resulted from these efforts.

In September 1964, the Bureau for Health Education organized an Advisory Committee on Swimming composed of representatives of the New York City Association of Teachers of Swimming, the New York City Association of Teachers of Health and Physical Education, the Association of Chairmen of Health Education, the American Red Cross in Greater New York, and the Bureau for Health Education. Organizing this committee was a key step in a cooperative plan to upgrade the program of swimming and water safety instruction in the New York City public schools. One of the main tasks of this committee was to develop a curriculum bulletin on swimming.

After a design for the proposed curriculum project had been drafted by the project coordinator and officially approved by the Curriculum Projects Committee of the Board of Education, the Advisory Committee became the working committee for the project. Committee members served as chairmen of subcommittees which developed the various sections of the proposed bulletin. The Advisory Committee carefully reviewed this draft. The project coordinator then prepared a revised draft and presented it to the Bureau of Curriculum Research for review. From January 1965 to June 1966, the committee worked on a further revision of the proposed bulletin with the cooperation of the Bureau of Curriculum Research. In July 1966, the project coordinator completed the third and final draft of the proposed bulletin.

# VALUE OF SWIMMING AND WATER SAFETY

## **Safety and Conservation of Life**

Drowning ranks third among the causes of accidental death. More than half of the nation's drowning fatalities occur among people between the ages of five and twenty-four. Swimming, water safety, and lifesaving instruction can reduce the number of accidents. There is a tremendous increase in participation in recreational water activities such as fishing, swimming, boating, canoeing, sailing, and skin diving.

## **Physical Fitness**

Swimming has been recognized as one of the best forms of physical activity, contributing equally to sound muscular development and the maintenance of good muscle tone throughout life. The President's Council on Physical Fitness regards swimming as one of the best of all conditioning activities. Schools are urged to include swimming in the physical education program. Research scientists in medicine, nutrition, and physical education have learned that inactivity and lack of exercise may be an important factor in the increase of heart and blood vessel diseases. Automation and mechanization have reduced the need for regular physical work. Riding in cars, trains, and planes requires little effort. Watching television and movies is part of the American way of life. We are becoming a nation of sitters—victims of our own technological advances. Water offers as much resistance and consequent exercise as desired. If a participant wants a vigorous workout, all that is needed is to swim more rapidly. If less strenuous activity is desired, one can swim more slowly and easily or assume the floating position.

## **Recreation**

Swimming is one of the most enjoyable recreational activities for children and adults. It is one of the most popular outdoor recreation activities and is unsurpassed as an all-age activity for the entire family. In an era of increasing leisure due to a shorter work day, a shorter work week, longer vacations and earlier retirement, it is essential to learn how to swim.

## **Mental Health**

Learning to swim helps many children gain a sense of satisfaction and achievement and overcome fears and inhibitions. Swimming offers

children an opportunity to enjoy the exhilaration that comes from success.

### **The Handicapped**

Swimming has long been recognized as an effective method of assisting the handicapped. It has proved most effective in the treatment of the after-effects of polio and in the treatment of neuromuscular and musculoskeletal disorders. The blind, it is said, feel more freedom in the water than in any other place. Instruction may be adapted to persons of varying degrees of ability and disability.

### **National Defense**

During World War II half of the men inducted into the Navy could not swim. Valuable time had to be taken to teach swimming. Today, all the armed forces teach swimming for survival as well as for fitness and recreation.

### **Vocational Preparation**

Swimming is of value as preparation for vocational opportunities such as swimming and water safety instructor, lifeguard, teacher of physical education, recreation leader, and as an asset in occupations involving travel on or over water, such as those concerned with commercial fishing, passenger lines, and cargo ships.

### **Need for School Program**

In 1951 the National Conference for Mobilization of Health Education, Physical Education, and Recreation was held in Washington, D.C. The conference was under the auspices of the National Conference for Mobilization of Education with the cooperation of the United States Office of Education. The National Conference recommended that:

1. Every school child should learn to swim.
2. Swimming should be an actual requirement for high school graduation.

All five boroughs of New York City are surrounded by water, making our youngsters vulnerable to water hazards.

The possibility of drowning of elementary school pupils has multiplied many times in recent years. Family camping, swimming in home pools, and family boating in which Americans are participating in

growing numbers have added to the hazard of water. Oceans, rivers, and lakes cannot possibly be supervised to eliminate the danger of accidental drowning. Instruction in basic swimming and water safety is a vital necessity.

## SWIMMING PROGRAM IN THE CURRICULUM

Swimming is a basic feature of the school physical education program, which in turn is an integral part of the school curriculum. In the curriculum guide, *Physical Education in Secondary Schools* (U.S.N.Y., State Education Dept., Albany, 1964), the suggested time allotment for swimming and water safety is 35 periods per year in grades 7-12. This is several times greater than the time allotted any other physical education activity. Swimming instruction is important because it contributes greatly to the attainment of educational objectives. It helps boys and girls grow and develop—physically, mentally, emotionally, and socially. In addition, swimming is an essential survival skill.

Pupils in elementary schools readily acquire basic swimming and water safety skills and knowledge in organized programs. If elementary schools install inexpensive instructional pools of limited size and depth, the annual drowning toll can be greatly reduced. In the school setting, youngsters are accustomed to group instruction. They have learned to accept discipline. They have not acquired fears growing out of fighting water.

## SCOPE

Our first emphasis is on class instruction of nonswimmers and on teaching beginners to swim. Classes in swimming are usually conducted every period of the school day as part of the regular physical education program. Pupils are classified according to ability and taught the skills of the appropriate American Red Cross courses—Beginner, Advanced Beginner, Intermediate, Swimmer, Advanced Swimmer, Junior and Senior Life Saver, Water Safety Aide, and Survival Swimming. In some schools special periods are provided for handicapped children.

After the regular school day there is a program of interscholastic competitive swimming for high school boys and an intramural or "club" program for high school girls. Clubs may stress life saving, synchronized swimming, or water ballet. Special events such as aquacades, water carnivals, water play days, water sports days, meets, and demonstrations are regularly planned and conducted.

## OBJECTIVES

**SAFETY:** Teach every boy and girl to swim. Develop skills, concepts, and attitudes enabling the pupil to take care of himself in the water and to help others.

**PHYSICAL FITNESS:** Develop physical fitness components, such as strength, endurance, and coordination, through participation in vigorous swimming activities.

**SKILLS:** Develop swimming and water safety skills of every boy and girl to the maximum of his ability.

**SOCIAL AND EMOTIONAL ADJUSTMENT:** Provide opportunities for joy and satisfaction in participating in wholesome leisure time aquatics activities. Develop courage, confidence, and self-reliance through overcoming fear and inhibition.

# Organization and Administration

## ADMINISTRATORS AND SUPERVISORS

It is the responsibility of the school principal to establish practices for the swimming areas in accordance with current Board of Education regulations. The principal, in high schools through the chairman of health education and in elementary and junior high schools through the assistant-to-principal assigned, determines schedules and supervises the teachers of swimming to insure safety and effectiveness of instruction.

The principal should define the standard procedures to be followed in the event of an accident in the swimming areas, including the standard procedure for reporting all types of accidents in the pool, shower room, and locker room. The school physician, nurse, principal, chairman or assistant-to-principal, teacher, and custodian must work closely together, for it is necessary to maintain close liaison with those concerned with health, safety, and sanitation.

## TEACHERS

Only teachers who hold regular, substitute, or ancillary license as teacher of swimming in day schools, on the appropriate level, may be assigned to teach classes in swimming. Teachers should wear appropriate swim suit and footwear for swimming instruction.

## SWIM LEADERS

Trained swim leaders should be assigned for safety and for more effective instruction. Student leaders may help with supervision of the locker room and excused pupils.

The teacher should:

Establish specific rules and regulations for student swim leaders.

Hold meetings of swim leaders at the beginning of each semester to clarify responsibilities and procedures.

Allocate specific stations and duties for swim leaders in the pool prior to class entrance to pool during class period and at the close of class period.

Provide distinctive uniform swim suits for swim leaders.

## POOL OPERATION

The water in the swimming pools of the Board of Education of the City of New York is tested periodically by a unit from the Department of Health. This is the same organization which tests the water of the city-operated pools and deals with pollution of water at the beaches during the swimming season. Where the water is found to be unsatisfactory, the Department of Health will proceed to correct the conditions without stopping the use of the pool. Where it is necessary to interrupt the use of the pool, a report to that effect should be forwarded to the Director of Health Education by the inspector from the Department of Health. The director will then notify the principal of the school to discontinue the use of the pool until further notice. The Department of Health will proceed immediately to take corrective steps. When the pool is again ready for use, the director will be notified, and he in turn will notify the principal of the school.

The amount of free chlorine should be not less than 1.0 part per million.\* Sodium hypochlorite should be used in preference to calcium hypochlorite in order to prevent excessive cloudiness of the water.

The pH value should range from 7.8-8.4.

Pool water temperature should be from 76°-80° Fahrenheit (80°-85° for physically handicapped children, 74°-76° for interscholastic competition).

\*Article 165, New York City Health Code.

Air temperature at eye level should be 5°-7° above water temperature.

Clarity of the water should be such that a black disc at the bottom of the deepest part of the pool, six inches in diameter, can be plainly seen at a distance of thirty feet.

The custodian-engineer is responsible for the safe and healthful condition of the facilities and equipment, as well as for regular inspection and repair.

The custodian-engineer is responsible for the following:

*Daily*

- Clean and disinfect pool deck.
- Brush bottom sedimentation toward drains.
- Vacuum bottom of pool.
- Clean safety equipment.
- Check lights.
- Clean filter room.
- Check operation of filters.
- Check pressure of pumps.
- Clean hair catcher.
- Check chemical filters.
- Inspect pipe fittings, heating units, valves, motors.
- Record residual chlorine (twice daily).
- Record water temperature (twice daily).
- Record air temperature (twice daily).
- Record relative humidity of pool air (twice daily).

*Weekly*

- Clean gutters.
- Backwash filters.
- Clean walls.
- Take sample of water for bacteriological tests (as often as required by the New York City Department of Health).

### **Facilities and Equipment**

Use only approved Board of Education equipment and supplies. Keep supplies and instructional materials on hand in sufficient variety and quantity, neatly stored in the storeroom.

Equipment should be only of the type officially approved and should be installed or repaired by a person or persons officially authorized for

this work. Repairs should be made when pool, shower room, and locker room are not in use. "Wet" and "dry" aisles should be clearly marked.

Advise chairman or assistant-to-principal of need for equipment and supplies, such as aluminum rescue poles, life jackets, ring buoys, kick boards, swim fins, rubber bricks for diving.

### **Bulletin Boards**

Post materials on bulletin boards such as curriculum outline, rules and regulations for the pool, emergency regulations, class schedule, school swimming records, and other instructional aids.

### **Suits and Towels**

Schools not equipped with steam sterilizers should make arrangements with a laundry to wash and sterilize swimsuits and towels. If the pupils take their suits home, they must be instructed in washing procedures. Before suits are used, they must be inspected by the swimming instructor for safety and cleanliness.

The teacher should establish an efficient procedure for the distribution and return of towels and swim suits. There should be a towel for each pupil. Shorts or underwear as swim suits should be prohibited.

### **Scheduling**

Swimming pools should be used to the maximum. If two teachers of swimming are assigned to a school with a pool, each teacher should teach five classes daily. When the pool is in use for ten periods every day, a full program for two teachers of swimming can be provided.

In schools with one swimming pool and a man and a woman teacher of swimming, the use of the pool may be shared by the boys and girls in several ways depending upon mutual agreement between the chairmen of department. For example, girls may use the pool during odd-numbered periods while boys use the pool during even-numbered periods. Another arrangement is for boys to use the pool during periods 1 - 5 in the fall semester and periods 6 - 10 in the spring semester, while the girls use the pool during periods 6 - 10 in the fall semester and periods 1 - 5 in the spring semester.

Since the physical plant, the student enrollment, the sharing of the swimming pool by boys and girls, and the administrative procedures in the schools vary, there is no one standardized procedure for assign-

ing pupils to swimming. The following suggestions, with many variations, have been used:

Students may be assigned by their physical education teacher from the gymnasium floor to the pool in homogeneous groups according to swimming ability. The New York State Education Department recommends a maximum class size of 30 pupils for swimming instruction (20 for nonswimmers).

Swimming instruction should be required for all pupils beginning with the fourth grade. As early as possible, every pupil should take a screening test, such as the American Red Cross Beginner's Test. The result should be entered in the pupil's cumulative health education record. Pupils who are classified as nonswimmers because of inability to pass the screening test should be given priority. If these pupils cannot pass the screening test at the end of the swimming instruction course, they should be scheduled to repeat the course.

Continuity promotes effectiveness of instruction in swimming. It is best to assign pupils for a daily period of swimming instruction for one semester. It is next best to assign pupils for a cycle of six weeks of daily instruction. While it may be expedient to assign pupils to classes meeting once a week, this is the least effective arrangement.

### **Medical Examination**

Any pupil who is participating in the regular program of physical education without restriction may participate in the swimming program without an additional medical examination.

Any pupil partially restricted from the full program of physical education *MUST* have an examination. It is possible that such a pupil can greatly profit by swimming activity. If swimming is approved as the result of an examination, either by the school or family physician, the pupil may participate.

### **MEDICAL EXCUSES**

Swimming is a vigorous physical education activity. Therefore, it is of utmost importance to know that a child is free from cardiac or any other serious defects. This fact should be ascertained by referring to the pupil's health record.

Pupils who request excuse from swimming must submit a doctor's note. These pupils should then be screened by the school physician. A notation, "Medically Excused from Swimming," should be on the pupil's cumulative health education record.

A maximum number of sessions for which temporary illness excuses will be accepted should be established. Pupils whose illness may be expected to extend beyond the maximum number of excused sessions should be rescheduled for an additional course. Students with physical disabilities restricting them from swimming should not be programmed for swimming. Students with physical disabilities whose family physicians prescribe swimming should be assigned to a special swimming class or to a swimming class with a low register.

It is seldom that all pupils in a class are able to go into the water. Pupils may have colds, other illness, or menstrual excuses. To make the session meaningful for these pupils and to keep them from distracting the pupils in the water, the teacher may plan a series of study assignments for excused pupils. The aim is not to compel ill pupils to swim, but to discourage those who would prefer to sit in the balcony and visit rather than participate in swimming instruction.

Another solution is to have the girls sit two seats apart in the balcony. For these girls it is an observation and learning period. No books are permitted in the balcony. Girls are permitted to be out of the water about five times during a six-week period. Any additional times out of the water must be made up by a designated date.

Pupils who are ill should be excused, and adjustments in the program made for those returning after an illness. Appropriate arrangements should be made, too, so that pupils can make up the work they have missed.

If the pool is not too far from the gym locker room, the excused pupils may go first to their lockers and get into their complete gym outfits before going to the pool balcony for the lesson. If sufficient lockers are available in the pool dressing room, excused pupils may bring their gym outfits to the pool and then dress in an assigned locker.

Sterilized gym suits from the lost and found collection may be provided for the excused pupils. The necessity for undressing deters most pupils from asking too often to be excused.

## PRESESSION INSPECTION OF POOL

It is of the utmost importance that a daily inspection of all pool facilities be made by the teacher before the arrival of pupils. If any unsafe condition exists, notify the supervisor immediately, block off the hazardous area or, if necessary, close the pool until the condition is corrected. The decision to close the pool should be made by the supervisor.

## Locker Room

Check for broken lockers and benches.

Turn on lights.

See that floors are clean and not slippery.

Check for satisfactory ventilation with blowers operating if necessary.

Check to see that the laundry attendant is on duty.

See that the rubber mats are in place in the wet aisles.

Check the hair dryers to see that they are working properly.

## Shower Room

The shower room must be supervised when in use.

Lights in the shower room should be turned on.

The floors should be clean and free of soap.

Soap dispensers should be functioning.

Hot water should be available for the showers (110 degrees maximum).

## Pool

Area lines separating shallow area from deep area should be in place.

Safety equipment such as ring buoy, reaching pole, shepherd's crook, first aid supplies, and rubber mats should be in place.

Check for burned out bulbs and loose tiles.

Inspect every pupil entering the pool for cleanliness and for signs of possible eye, ear, nose, throat, or skin infection. Those who show any sign of illness must be excluded from the pool.

## ROUTINE PROCEDURES

Standard regulations<sup>1</sup> for use of locker room, shower room, and swimming pool, in large, bold letters, should be posted conspicuously in each of these areas.

In addition, mimeographed or printed copies of the rules may be issued to each pupil. After these rules have been explained and discussed to make sure every pupil understands them thoroughly, each pupil should sign the *Swimming Safety Pledge*. The teacher should keep a record of this safety instruction and keep on file a signed copy of the *Pupil's Swimming Safety Pledge*<sup>2</sup> for every pupil participating in the swimming program.

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1. Appendix, page 57.

2. Appendix, page 58.

- No pupil may enter the pool area until the teacher opens the door and gives the signal to enter.*
- Insist that all pupils respond instantly to the whistle.
- Discourage pupils from bringing valuables to the pool but provide a safe place to store those that are brought.
- Station leaders before class instruction begins.
- Establish a routine of admission to the locker room through a specified entrance.
- At the beginning of each period, count the number of pupils in the group.
- Designate danger areas and instruct swimmers regarding safety.
- Each pupil must take a shower in the nude, using soap before entering the pool, and again if the student must leave the pool to use the toilet.
- Pupils should test the water temperature with their hands before getting under the shower.
- Toilets should be used before taking a shower.
- Running and pushing, horseplay, ducking and screaming are prohibited. Pupils who persist should be excluded.
- Pupils should expectorate or clear their noses using the gutters at sides and ends of the pool.
- Diving is restricted to the deeper portion of the pool always under the supervision of the teacher. Only one person is permitted on the diving board at a time.
- At the close of the period, the class should line up for dismissal. The teacher should then examine the pool to make sure all have left the water. Then the teacher should count the number of pupils in the group and compare with the attendance taken at the beginning of the period.
- After the last pupil has entered the locker room, the teacher should lock the door and take a position at the entrance so that no student can return to the pool.
- Pupils are required to take a shower after a swim and to dry their hair thoroughly before leaving the building. This is very important in cold weather. If necessary, lengthen the dressing period to allow adequate use of hair dryers. Urge pupils to bring woolen scarves or hats to wear after swimming, during cold weather.
- Persons not dressed for swimming are barred from the pool area. Bathers are prohibited from areas for spectators (Sanitary Code, New York City Department of Health).
- Persons wearing street shoes should not walk on the pool deck.

Hair dressings and shampoos packaged in glass containers are prohibited. Plastic containers are permitted.

Diving in shallow water is prohibited.

Girls must remove all bobby pins and clips, jewelry and make-up.

Chewing gum, candy, food, street shoes, notebooks, textbooks, purses, and similar items may not be brought into the pool area. This also applies to contact lenses, dentures, and glass eyes.

Good locker room manners (no towel snapping or scuffling) are required.

Walk, not run, at all times.

*Check each locker and all doors to pool and corridors at the end of the day. Doors should always be locked unless the teacher is present.*

## EMERGENCY PROCEDURES

Post this form near every telephone in the swimming area.

### EMERGENCY TELEPHONE NUMBERS

PRINCIPAL ..... \_\_\_\_\_

CHAIRMAN OF HEALTH EDUCATION

or

ASSISTANT-TO-PRINCIPAL ..... \_\_\_\_\_

CUSTODIAN-ENGINEER ..... \_\_\_\_\_

GENERAL OFFICE ..... \_\_\_\_\_

POLICE ..... \_\_\_\_\_

HOSPITAL ..... \_\_\_\_\_

Notify the principal or the chairman or assistant-to-principal immediately. Request him to telephone the police and state the nature of the emergency and to notify the parents. Send a messenger to the principal or supervisor if there is no telephone. Send for other teachers to help.

Standard procedures should be followed during emergencies. All teachers and students must abide by these regulations. Because of variations in school facilities, there may be special regulations drawn

up by the school administration. The teacher of swimming must be familiar with the local school regulations. Below are some general practices which have proven successful:

### **Fire and Shelter Drills**

The teacher should know the school's rules of procedure during fire and air shelter drills.

Fire and air shelter drill directions should be posted in conspicuous places in the pool and dressing areas.

At the beginning of each semester the teacher should explain the procedure for the drills and hold practice drills.

The teacher should insist on silence and strict obedience during these drills.

In schools without an intercom system, the custodian or the administrative assistant must notify the teacher in case of an actual fire.

If the pupils are in the water when the fire gong rings, they must get out of the water immediately and either line up on the pool deck in silence, or proceed to the dressing room and stand in the "wet" aisles adjacent to their lockers.

Pupils in the balcony should line up at the door leading to the nearest fire exit.

If there is an air shelter drill, the pupils from the water, the balcony, and the locker room should line up in the "wet" aisle in the locker room and follow the teacher's directions.

### **Reporting Accidents**

Minor accidents such as cuts should be given first aid care at once and accident forms filled out and filed according to the school's established procedure.

In a case of a serious accident the teacher should apply first aid immediately and send a messenger to report the accident to the principal or the administrative office and to the chairman of health education. The class should be directed to leave the water and to proceed into the dressing room quickly. The statements of the teacher, the witnesses, and the victim must be recorded on the accident forms as soon as possible.

### **First Aid**

Alert supervision will keep the number of accidents down to a minimum. When an accident does occur, however, first aid must be

provided. Falls are the most frequent type of accident around a swimming pool. Such falls are usually caused by running or slipping on the deck.

*All teachers of swimming should possess an American Red Cross Certificate as First Aid Instructor.*

Interoffice and outside telephone communication systems should be installed in all pools with telephone numbers posted for emergency use. Where there are two offices, one girls and one boys, this telephone equipment should be installed in each office. Dual sets of first aid equipment should be provided where necessary.

## PROGRAMS IN SCHOOLS WITHOUT POOLS

In New York City there are many indoor pools operated by agencies such as Boys Club, the Department of Parks, the YMCA, churches, and temples. Often these pools are not utilized during school hours. Some of our schools have been providing swimming instruction for many years through the use of such facilities. Where a school is within seven minutes' travel time from a community agency pool, the principal may explore the possibility of adding swimming to the school program of physical education. These procedures should be followed:

### Organization

Visit by district health education coordinator and representatives of the school and the Bureau for Health Education to confer with the representative of the agency to check the following:

Willingness of agency to make facilities available

Travel time from school (no more than seven minutes; if pool is not within walking distance, it may be possible to arrange for bus transportation)

Health and safety features such as:

Lighting	Dressing room, lockers, showers
Heating	Fee
Ventilation	Days and hours available
Capacity	Swimsuits
Entrances and exits	Towels

Preliminary letter from representative of agency to assistant superintendent (district), with copies to the deputy superintendent in

charge of the Bureau for Health Education and to the director of health education. The letter should indicate willingness to make facilities available, describe the facilities, and indicate days and hours for exclusive use of the facilities by the school.

Letter from assistant superintendent (district) to the Superintendent of Schools, with copies to the director of health education and to the representative of the agency, requesting that arrangements be made for the use of the facilities and that a licensed teacher of swimming be assigned to conduct the proposed program.

### Administration

The principal of the school should provide a teacher who will be responsible for the decorum of the children en route, in the locker room, and in the pool. A parent may assist the teacher in these duties but may not substitute for a faculty member.

A teacher of swimming employed by the Board of Education is on duty in the pool to provide swimming instruction. Teachers who accompany pupils to the pool, are urged therefore, to dress in appropriate swimming attire and assist in the program of instruction.

No pupil may participate unless written parental permission is granted. These permission slips should be kept on file in the school office.

The swimming period is to be regarded as the physical education period for that day.

The principal should dismiss pupils early enough for them to be in the pool on time.

Facilities should be used to the maximum, with class size of 30 pupils. Questions concerning this program should be addressed to the district health education coordinator.

There should be no charge to pupils for this program. However, pupils may be expected to furnish their own towels and suits, and girls should have caps.

#### SUGGESTED DAILY SCHEDULE FOR A POOL

Class No. 1	9:00—10:00 A.M.
Class No. 2	10:00—11:00 A.M.
Class No. 3	11:00—12:00 A.M.
Class No. 4	1:00— 2:00 P.M.
Class No. 5	2:00— 3:00 P.M.

# Scope and Sequence

Copies of the *Water Safety Instructor's Manual, Swimming and Lifesaving Courses\** and other material published by the American National Red Cross, Washington, D.C. 1961, will be distributed to every teacher of swimming in the New York City public schools at the same time as copies of this curriculum bulletin are distributed. Therefore, there is no need to reproduce in detail the materials which appear in the American Red Cross manual. We will continue, as we have in the past, to follow the methods of teaching and the scope and sequence of subject matter in the American Red Cross *Water Safety Instructor's Manual, Swimming and Lifesaving Courses*. In order to give a complete picture of our curriculum in swimming, however, the following summary of the American Red Cross swimming courses is presented:

## Beginner Course

Breath holding	Changing position
Rhythmic breathing	Changing direction
Prone float	Turning over
Prone glide	Leveling off
Back float	Jumping into deep water
Back kick glide	Releasing cramps
Finning and flutter kick	Assisting nonswimmer to feet
Human stroke and flutter kick	Reaching assists

## Advanced Beginner Course

Rhythmic breathing	Diving and underwater swimming
Swimming in place	Use of lifejacket (or other flotation device)
Changing position	Elementary forms of rescue
Elementary backstroke	
American crawl stroke	

\*Appendix, page 61.

### Intermediate Course

Flutter kick on front and back	Turns
Scissor kick	Floating
Breaststroke kick	Sculling
Sidestroke (arms)	Treading water
Breaststroke (arms)	Underwater swimming
Elementary backstroke (complete)	Running jump into deep water
American crawl stroke	Plain diving
Sidestroke	Rescue skills
Breaststroke	

### Swimmer Course

Breaststroke	Inverted breaststroke kick
Sidestroke	Jackknife surface dive
Crawl stroke	Tuck surface dive
Back crawl	Long shallow dive
Turns	Running dive
Inverted scissor kick	

### Advanced Swimmer Course

Elementary backstroke	Floating
Breaststroke	Resting in floating position
Inverted breaststroke	Treading water
Sidestroke	Swimming in place
Overarm sidestroke	Tuck surface dive
Trudgen	Feet first surface dive
Back crawl	Running dive from deck
American crawl	Running dive from board
Trudgen crawl	

### Survival Swimming Course

Remaining afloat	Speed swimming
Distance swimming	Entry into water
Underwater swimming	Rescues

### Junior Lifesaving Course

Resting in floating position	Chin pull
Swimming in place	Hair carry
Treading water	Use of pole hook
Release of cramp	Locating submerged objects
Reaching assists	Rear approach

Wading assists  
Throwing assists  
Assists using free-floating objects  
Reaching and wading with  
    extensions  
Small craft safety  
Taking off from shore  
Approach stroking  
  
Adaptation of strokes for  
    lifesaving  
Quick reverse  
Surface dive  
Swimming rescue with  
    equipment

Underwater approach  
Approach to submerged victim  
Cross chest carry  
Tired swimmer carry  
  
Pivot carry  
Front head hold release  
Release for double grip on one  
    wrist  
Rear head hold release  
  
Artificial respiration  
Saddle back carry  
Discussion related to water safety

### Senior Lifesaving Course

Adjustment to the water  
Resting in floating position  
Swimming in place  
Treading water  
  
Release of cramp  
Disrobing  
Reaching assists  
Wading assists  
Throwing ring buoy  
Use of free-floating supports  
  
Reaching and wading with  
    extensions  
Boat assists  
Approach stroking  
Regular and inverted scissor  
Shallow arm pull  
Arm pull and kick  
Swim on back, legs alone  
Surface dives  
Use of pole hook  
Locating submerged victim  
Recovering object from bottom

Taking off from shore  
Getting in and out of small craft  
Assisting passengers in and out  
Correct rowing and paddling  
    positions  
Changing and exchanging positions  
Sculling or paddling with single oar  
Hand paddling canoe  
Entering craft from deep water  
Righting and entering capsized  
    craft  
Rear approach  
Underwater approach  
Front surface approach  
Approach to submerged victim  
Approach and chin pull  
Transition from approach to hair  
    carry  
Hair carry  
Cross chest carry  
Head carry  
Tired swimmers carry  
Block and carry  
Block and turn

Quick reverse	Pivot turn parry
Front head hold (2 methods)	Lift from deep water
Double grip on one wrist	Boat rescue
Rear head hold	Canoe rescue
Breaking two victims apart	Mouth-to-mouth artificial respiration
Fireman's carry	Silvester method
Saddle back carry	Back pressure—arm lift method
	Discussion related to water safety

## SUGGESTIONS FOR THE TEACHER

These factors affecting learning should be considered:

**FATIGUE:** Fatigue diminishes a pupil's ability to be attentive and to learn.

**FEAR AND EMOTIONAL STRESS:** Tension resulting from fear or emotional stress retards learning. Fear may cause a pupil to become tense, flail the water ineffectually with his arms, and then sink beneath the surface.

**PHYSICAL CONDITION:** A pupil who is not feeling well will progress less rapidly than usual.

**ENVIRONMENTAL CONDITIONS:** When air or water temperature is too low, when there is too much noise, or when lighting is poor, learning is inhibited.

**FREQUENCY AND LENGTH OF PRACTICE:** A greater number of shorter periods will be more productive than fewer but longer periods. This is particularly true for the beginner because his inefficient movements hasten the onset of fatigue.

**PREVIOUS EXPERIENCE AND PRACTICE:** If past learning has been faulty, learning is impeded, since previous habits must be eradicated before the learning of correct techniques can begin.

**PUPIL REACTION TO THE WATER:** Many persons are inhibited in their first approach to the water by fear of drowning. From the very beginning of the learning process, definite planned steps must be taken to reduce fear. In the water the pupil faces a whole series of experiences that may add to his discomfort. The pressure of the water over the chest is inhibiting to breathing. Water splashed on the face is often discomforting. Opening the eyes under water is frequently a disturb-

ing experience. Cool water in the ears, the nostrils, and even the hair is sometimes unpleasant. Offsetting these experiences, however, there can be the exhilaration caused by contact with water and the stimulus of a new and strange experience. These factors, plus a patient approach by the instructor to getting the pupil adjusted to the water, will do much to help him accept the attendant discomfort.

**PUPIL REACTION TO DISCOURAGEMENT:** After the pupil makes the necessary adjustments to the water and gains confidence, he is often faced with another problem—discouragement. During the learning process most swimmers experience a plateau in learning, a time when all their efforts to improve seem to be of no avail. This may happen at any time, with the first propulsive efforts of the beginner, or even at the time when the swimmer is working on the finely coordinated movements of the crawl stroke. It is then that the instructor has to use all the tact, patience, and encouragement to help the pupil hurdle the obstacle.

**DEMONSTRATIONS:** Demonstrations should be given before a skill or stroke is attempted by the pupils and should be repeated at intervals thereafter. The analysis should be presented very slowly. Possible errors and faults should be pointed out and explained.

**COMPETITION:** The rate of learning may be increased by competition used as a device to stimulate individual efforts. Excessive pressure and tension retard learning. Competition for the beginner should be limited to trying to exceed the distance made on the previous attempt. The swimmer should try to cross the pool in fewer strokes. He should strive initially to compete against his own best efforts.

**REWARDS:** The emphasis should be on reward rather than punishment. Use the positive incentives of recognition, praise, and increased privileges.

## DEVELOPING SKILL

Learning how to swim is difficult. One must be concerned with accuracy, coordination, speed, and energy expended while performing the movements. Coordination of arms, legs, and breathing is important. Any deviation changes the specific stroke.

Man is by nature a land animal and is therefore not at home in the water. He must learn to be comfortable in the water. The problems of acquiring proficiency in a swimming skill are complicated because of the resistance of water and the individual body differences. There-

fore, in teaching a pupil to swim, the teacher must provide him with the opportunity to make physical and mental adjustments to the water, to find and maintain a good working position in the water, and to practice the desired pattern of movement in terms of accuracy, coordination, speed, and expenditure of energy.

## CONDITIONING

One of the most difficult problems with which the teacher of swimming has to contend is the discomfort of his pupils, particularly due to chilling. A learner who is uncomfortably cold cannot concentrate on what he is trying to do. Everything possible should therefore be done to remove the cause of discomfort due to cold. If the teacher deems it advisable, he may conduct a brief calisthenics drill on the pool deck before the class enters the water. There are many exercises from which to choose. Trunk bending, twisting, and rotation are of special value in warming up.

Genuine conditioning is really a matter of getting the pupil used to longer periods of immersion by gradually increasing the length of time he stays in the water. The teacher must exercise good judgment based upon knowledge of water and air temperatures and the condition of his pupils. Occasionally it is well to break the water practice period for further explanation or demonstration. The intervals should be timed to coincide with the pupils' need for a "breather" and rarely should the teacher's analysis be more than the minute or two the pupils need to rest. Since time is limited, the teacher must be brief.

The teacher should always observe the individual members of his class and send out of the water any pupil who shows signs of extreme discomfort, distress, or exhaustion. Nonswimmers and beginners should not swim more than thirty minutes. More advanced swimmers may swim longer if conditions are good and they are not too fatigued.

## BREATH CONTROL

One of the most difficult swimming skills to master is breath control. The swimmer must breathe regularly if he is to swim any distance and do it in such a way that there will be a minimum break in the stroking rhythm and a limited effect upon body position. The experienced swimmer exhales under the water but the nonswimmer finds this difficult. Therefore he must practice this skill beginning with the very first lesson. It is important at this stage of learning that the pupil acquire the ability to submerge and exhale several times in rapid

succession. Incorrect breathing can contribute to sinus and ear infections.

Correct breathing is important in learning the prone float. In order to maintain maximum buoyancy, normal breathing must be altered with the pause between breaths occurring after the inhalation rather than after exhalation. When the lungs are filled with air the body rides higher in the water. When the air is expelled from the lungs, the body begins to settle, but an immediate inhalation checks the sinking and returns the body to its high riding position.

Further practice in breath control is obtained through drills which combine specific arm stroke or leg kick with the appropriate breathing rhythm, and additional experience is acquired by practice in deep-water bobbing, diving, and underwater swimming.

During the course of the mastery of strokes by the pupil, the teacher must ascertain that the swimmer is exhaling correctly as well as inhaling. A common fault is that the beginner breathes in but constricts his muscles against expiration, with the result that his lungs soon become filled with air and his breathing rhythm breaks down.

There is no rule requiring the swimmer to breathe regularly on every second arm stroke. Some champions breathe every third or fourth stroke or vary the rhythm. Whether one breathes on the right or left side is not important, either. It is important, though, that the swimmer exhale some or all of the air through his nose in order to prevent the entry of water into his nose. Inhalation should be done through the mouth only.

## RHYTHMIC BREATHING

It is impossible to swim any stroke correctly without knowing how to breathe correctly. This means inhaling through the mouth and exhaling through the nose and mouth rhythmically. Controlled breathing prevents swallowing water and getting water into the sinuses.

Normal breathing is often inhibited by fear, which causes the swimmer either to hold his breath or to breathe at the wrong time. It is therefore necessary for the swimmer to establish on land a well-timed breathing cycle before practicing in the water. Once the rhythmic pattern has been established the pupil can practice this skill in waist-deep water, first to the teacher's audible count, then to his own count.

The next step is to practice the breathing and the arm movements while standing in chest-deep water. Follow this by walking across the

pool, using arms and rhythmic breathing. It is easy then to combine the arms, legs, and breathing into a well-coordinated crawl stroke.

## TREATMENT OF CRAMPS

Cramps occur often enough to justify a brief explanation of their causes and treatment. Most cramps affect toes, fingers, arms, and legs. These are caused by failure to stimulate the circulation before exercise or by fatigue resulting from overexertion or low body resistance. Fatigue products accumulate in the muscles more quickly than they can be removed. Preventive measures include a warm shower, massage of the arms and legs and gradual warmup. Although this type of cramp doesn't incapacitate a swimmer, it may contribute towards panic. Change of stroke, relaxation and squeezing, massage and stretching of the affected muscles usually bring relief. For cramp of the lower legs, massage of the foot arch and gentle pressure on the toes help.

## CORRELATION OF SWIMMING WITH HEALTH TEACHING

Correlation of swimming with health teaching is desirable. Swimming, more than any other physical education activity, favors personal hygiene and body cleanliness. Thus, swimming and daily inspection before use of the pool develop the habit of showering and cleanliness. In addition, because the pupils are in swimsuits, the teacher can spot possible medical problems which could not be seen by any other teacher.

The teacher of swimming is able to reinforce health concepts taught in the classroom through the personal relation established with the pupils. He can follow up health problems such as "athlete's foot." He can insist upon medical clearance for such ailments as plantar warts and skin eruptions, thus promoting the health of the pupil. He can therefore suggest a physical examination which might otherwise not be considered necessary by the pupil or his parents.

The swimming class provides a splendid opportunity for direct health teaching. From the very first day at the pool there will be emphasis on good health and cleanliness and on the prevention of colds, sinusitis, athlete's foot, and menstrual difficulties.

The swimmer who advances beyond the elementary stage develops an understanding and an appreciation of the contribution of swimming to physical fitness.

## TEACHING AIDS

Teaching aids are devices which the teacher may use to assist pupils in learning new skills. Flotation devices are never a substitute for mental adjustment to water. The beginner should learn to adjust to the pressure, temperature, and buoyancy of the water without the use of flotation devices. He should demonstrate that he no longer fears the water. Proof is the ability to remain submerged in waist-deep water for 15-20 seconds, the ability to bob 15-20 times, and the ability to do a prone float or glide. Only after he has made these adjustments should a flotation device be used to maintain a good body position and to develop patterns of movement.

*Free-floating devices* include kick boards, water wings, rubber tubes, canisters, and water polo balls. These are helpful as supports for practicing a skill such as the flutter kick or the frog kick or to establish a good body position. They should never be used by anyone who fears the water or who doesn't know how to get up unaided from a prone or supine position.

*Nose clips* are used to keep water out of the sinuses and to develop mouth breathing.

*Swim fins* are excellent aids in developing strong front and back crawl kicks. Pupils who have difficulty breathing because of poor body position and a weak kick can, with a little practice with swim fins, strengthen the kick and assume the proper body position for correct rhythmic breathing.

*Nonfloating objects*, such as hockey pucks or rubber discs placed on the bottom of the pool in shallow water, are valuable aids in teaching nonswimmers buoyancy, breath holding, and opening the eyes under water. Later, these objects, placed in deeper water, can serve as aids in teaching surface diving.

*Stationary supports* such as the pool deck, the overflow trough, and the ladders can be used in teaching swimming skills to large groups. Warm-up exercises in the water can be performed using these stationary supports.

*Reaching pole and shepherd's crook* are useful in making the transition to deep water.

*The whistle* can be used to fix attention on the instructor when he wishes to give instruction or offer corrections. It is a voice saver, but

should be used sparingly. If blown too often, and for little purpose, the pupils may ignore it. A short blast is more effective than a long one.

*Audio-Visual aids* are very useful in the teaching of swimming. Audio-visual aids include the blackboard, bulletin board, charts, diagrams, films, filmstrips, pictures, posters, record players, slides, and tape recorders. Such aids facilitate learning, save time, add reality and meaning, develop accurate concepts, and make for better retention. Use audio-visual aids to introduce new skills, to clarify concepts, and to enrich experiences.

## CLASSIFICATION OF PUPILS

Classification should be simple. The American Red Cross tests for Beginner Swimmer, Intermediate Swimmer, and Swimmer are sound and should be used.

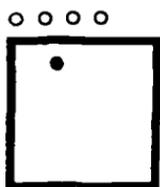
Use colored caps and/or colored suits to indicate classification—red for nonswimmer, yellow for intermediate, green for swimmer.

## FORMATIONS

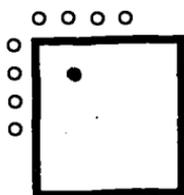
In organizing the class for instruction, the teacher should place the pupils so that everyone can hear his explanation, see the demonstration, have an opportunity to practice the skills learned, and be checked for achievement.

### On the Pool Deck

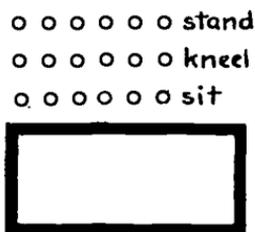
Below are three of many formations which may be used so that everyone can see the demonstrations. It is important to see that the sun or light from the windows is behind the pupils and that the group faces away from any distracting influences. These formations are useful in establishing a pattern for rhythmic breathing and for practicing arm movements.



SINGLE LINE



"L" FORMATION



MULTI-FILE

## In the Water

In addition to the three formations above, the teacher may use the circle or the semicircle formation if the group is not too large. To practice combined skills in the water, the two methods commonly used are the stagger formation and the wave formation. The stagger formation is used for individual correction. The first pupil begins to swim across the pool. When he has progressed ten feet, the next one begins to swim. The wave formation provides an opportunity for more pupils to move at the same time. Because they are not too close together, there is less danger of colliding. In this way the pupils are less likely to become chilled because they are sufficiently active.

## ASSEMBLY LINE TEACHING

Assembly line teaching has been used successfully in handling large numbers of pupils. In smaller groups pupils are able to work at their own skill level and rate of learning. A disadvantage of this method is the possible loss of contact between teacher and pupils. If a modified assembly line is used, however, pupils get the satisfaction of learning and practicing new skills at their own rate of learning under the same student leaders who see the results of their efforts.

Here is a *modified assembly line* plan which has been used successfully with a class of nonswimmers:

1. The pupils enter the water from a sitting position. After becoming adjusted to the water, they grasp the overflow trough and practice the flutter kick, front and back, to the teacher's count.
2. Taking a partner by the hand, working in pairs (buddy system), first one pupil and then the other tries to lie prone on the water and then tries to regain a standing position. Some pupils learn more quickly than others. Those who have mastered the first step go to another area of the pool where they will work as Group II.
3. Pupils in Group II learn the second step, which is to push off in a glide towards one's partner, who will catch his hands and assist him to stand erect. When they have learned this skill, they go on to Step III, which is to regain a standing position unaided. Pupils remain with the same instructor.
4. When more of the original group have completed Step I, a new group for Step II will be formed with the designation Group II.
5. This procedure goes on until all have learned to swim, to breathe

rhythmically, and to float on their backs.

This modified assembly line plan provides continuity of instruction and presents a challenge to the student leaders, who take great pride in the results of their teaching.

## PLANNING LESSONS

Every swimming lesson should follow a definite plan.\* The same plan cannot be used for all classes since the pupils vary in age and ability. There is, however, a general pattern the class work should take which can be applied flexibly to any class. The following plan is recommended:

### Review

After the class has been called to order and the necessary administrative details are completed, the first item should be a brief review of the work covered during the previous lesson. This review can be in the form of a discussion, demonstration, or a brief test. The purpose of the review is to establish a relationship between what has already been learned and the new skills to be learned.

### Demonstration of New Skills

Immediately following the review, the instructor sets the stage for the practice portion of the lesson. It is here that the teacher must have his material clearly in mind. His explanations, demonstrations, and analysis must be clear and concise. He may explain first and demonstrate afterward, or he may talk and demonstrate simultaneously.

### Warmup Drill

The warmup drill serves more than to stimulate circulation. It is also useful in fixing attention. The time given to this drill may vary from two to five minutes.

### Practice Period

Some time should be devoted to rhythmic breathing. Bobbing in a rhythmical pattern will improve breath control and should make the pupil more at ease in the water. This should be followed by a quick review of the previously learned skills which have a relationship to

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\*A suggested outline for a lesson plan is included in the Appendix, page 56.

the new skill to be learned. Then comes the teaching of the new skill. During this phase criticism should be directed first to the entire group and then to individuals according to their needs.

### **Tapering Off**

The last few minutes of the class period may be devoted to play, either informal or organized. Stunts, simple games, or relays may be used.

### **Summary**

Before dismissing the class from the water, the teacher should, either orally or by demonstration, recapitulate the skills learned during the lesson. This fixes in the pupil's mind the concepts taught.

### **Assignment**

Give a definite assignment. Make sure the assignment is based on what the pupils have learned.

## **ORIENTATION**

Since many pupils assigned to the swimming classes have never seen a swimming pool and its adjacent dressing room, use the first two lessons each semester to familiarize the pupils with the physical plant and the safety procedures to follow in using these facilities.

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### **Lesson I**

Seat the pupils in the balcony.

Take attendance.

Explain the procedure for temporary excuses from swimming.

Explain the need to use school suits and towels.

Explain the purpose and advantage of wearing a bathing cap.

Introduce the student leaders in their distinctive colored bathing suits.

Conduct the class to the dressing room and explain:

attendance check by the teacher

locker assignment

distribution of suits and towels

the location of the lavatory

the proper use of the dressing compartments  
the use of the "wet" and "dry" aisles  
the warm shower with soap  
inspection  
entrance into the pool area when the door is opened by the teacher  
after showering and dressing, the return of suits and towels to the  
proper receptacle  
use of the hair dryers

Have several swim leaders demonstrate:  
the proper entry into the water from a sitting position  
the water warmup  
the count-off for safety  
swimming in waves  
demonstration of strokes  
proper exit by the ladder from the water

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## Lesson II

Admit pupils to the pool area.  
Take attendance and record number on the attendance sheet.  
Assign lockers.  
Remind pupils about proper use of the "wet" and "dry" aisles and  
about taking a complete shower with soap.  
Have swim leaders assist with the inspection.  
Have pupils sit on the edge of the pool with feet in the water.  
Student leaders demonstrate the proper way of entering the water.  
Assign leaders to assist the timid.  
Practice the routine of entry into the water, warmups and count off.  
Give pupils time for a free swim in the shallow area so that the teacher  
can arrange class into groups.  
For nonswimmers teach adjustment to water.  
Exit from the pool by the ladders.  
Count off and exit to the shower area.  
Supervise dressing, drying of hair, and the return of suits and towels  
to the proper receptacle.

# Swimming Instruction for the Handicapped

"Swimming is an activity that is adaptable to persons with physical defects and certain mental abnormalities. The crippled, the spastic, the paralyzed, the blind, the amputee, and the injured may find in swimming a means of physical expression available to them in few other types of activities. The buoyancy provided by the water permits the handicapped person to execute movements and stunts which he cannot do on land. In many respects water is a great equalizer for the handicapped person. It permits him to acquire skills and reach levels of achievement that often parallel or surpass that of the normal individual."\*

## GOALS IN THE PROGRAM

The educational goals for children with physical limitations are the same as those for all children—to help them achieve maximum growth and development and to help them lead as full a life as possible. The swimming program for the physically handicapped aims to promote the maximum physical, mental, emotional, and social development of these youngsters by extending to them the same opportunities which are offered normal youngsters.

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\**Aquatics K-12*. (Albany: The State Education Department, Curriculum Development Center, 1966), p. 6.

## CONSIDERATIONS FOR TEACHING THE HANDICAPPED

The basic principles of teaching swimming to the handicapped are the same as for teaching the normal child. Some adjustments are necessary, however. The New York State Education Department recommends a water temperature of 80° to 85° for handicapped children. Deviation from the normal sequence in teaching is sometimes necessary. For example, flotation devices are usually introduced earlier. Changes will be in accordance with individual needs. The doctor's specific directions should be followed. Class size should be limited to six pupils, and a swim leader assigned to each handicapped pupil.

NOTE: Since the American Red Cross *Swimming for the Handicapped—Instructor's Manual* (ARC 1092, rev. Feb. 1959) is an authoritative guide on this subject, every teacher of swimming will receive a copy with this curriculum bulletin. Additional copies may be obtained on request.

# Intramural Program: Girls

An effective intramural program will help to develop an interest in swimming that will endure after the beginner's skills have been mastered. The pupil will want to continue beyond the elementary skills to more advanced and challenging swimming and water safety courses. This leads to healthful, safe enjoyment of water activities throughout life.

## GAMES

Water polo, volleyball, and a wide variety of group games, relays, and contests meet the needs of youngsters of all levels of ability. Pages 153-159 of the *ARC Water Safety Instructor's Manual: Swimming and Lifesaving Courses* provide a useful list of such activities.

## ARC LIFESAVING AND WATER SAFETY AIDE COURSES

The ARC Junior and Senior Lifesaving and Water Safety Aide courses have places in the swimming program. These courses may be included in the intramural program or in the swim leaders' training program.

## ARC 50 MILE SWIM

This activity helps develop physical fitness, especially endurance, and is very popular with boys and girls.

## SWIMMING MEETS

Events for swimmers of each ability level may be included, such as

simple stroke competition for form alone, stroke competition for speed, and diving.

The following suggestions have been helpful in planning and conducting swimming meets:

1. All swimming meets should be planned to include as many girls as possible.
2. Each girl may enter only one speed and one form event in a meet.
3. In swimming meets, girls should be classified according to their swimming ability:
  - Class A—Advanced—not more than 100 yards
  - Class B—Intermediate—not more than 50 yards
  - Class C—Beginners—not more than 25 yards
4. Form events should not be longer than one length of the pool.
5. A swimming meet may include speed events, form, novelty, diving, relays.
6. All trial heats should be conducted before the day of the meet.
7. Score the following events only: Speed, Form, Diving.
8. All obstacle or comic races should not be counted towards the result of the meet.
9. A girl should compete in her own class only.
10. Only a whistle should be used for starting.
11. The program of events should be presented by the teacher of swimming to the chairman of health education before the meet. This program should conform to the Girls' Branch P.S.A.L. standards.
12. It is the policy of the Girls' Branch P.S.A.L. that women act as officials at all girls' games and competitions. If no woman official is available, however, the chairman of health education may ask a qualified man to officiate.

### Officials

3 judges	1 clerk	1 scorer
1 starter	1 timekeeper	1 announcer

### Procedure

To expedite the events, the clerk should arrange the contestants for the next event while an event is being run off.

A program listing the events by number should be prepared. These numbers should be printed on large placards. This helps everyone follow the program.

Placards with numbers 1-2-3 should be placed in front of the winners after every event.

Swim meets should not last more than one hour.

### Scoring

In accordance with the standards of the American Physical Education Association, the Girls' Branch P.S.A.L. practice is to emphasize team scoring and not individual scoring. Swim meets should be run on the basis of team competition.

For individual events—5, 3, 1 scoring (to count toward team).

For relays—10 for the team; 3 points for each contestant.

## SWIMMING PLAY DAYS

Swimming play days should be conducted as other play days, with the emphasis on the recreational and social aspects of the activity rather than individual competition. At least three other schools in addition to the home school should participate.

The invitations should be issued long enough in advance for the guests to prepare synchronized numbers for presentation and for them to send the names of the participants from each school for inclusion in the program.

Teams should be made up of an equal number of pupils from each school on each team. This prevents rivalry among schools and encourages team loyalty.

Schools without pools should be encouraged to attend these play days and to participate in the team competition and in the diving and synchronized swimming numbers.

Medals will be provided by the Girls' Branch P.S.A.L. for the winning team. If the home school wishes to provide awards to the winners of each event, it may devise some simple prize such as ribbons, individual plaques made by the students, or even a candy bar.

At the conclusion of the play day simple refreshments may be served at the pool balcony or in the teachers' cafeteria.

## SYNCHRONIZED SWIMMING

Synchronized swimming is a worthwhile activity for all ages. It develops endurance, poise, rhythm, and grace. It requires teamwork which helps to develop good sportsmanship. It offers an outlet for creative ability and promotes the wholesome use of leisure time.

Synchronized swimming, which has a definite place in the swimming program, is any type of aquatic routine planned and executed to music. It is fun for those taking part. For the poor swimmer it provides strong motivation to learn to swim better. There may be one, two, or many swimmers working in unison to music or to an established rhythmic beat. Synchronized swimming includes form swimming, stunt swimming, tandem swimming, water ballet, floating patterns, and fancy diving. It is not unlike a dance routine in form, timing, and composition.

Stunt clubs may be used as a training group to develop synchronized swimming skills.

### **Content**

Standard strokes

Modified strokes

Stunts: ballet leg, dolphin, kip, oyster, submarine, catalina, flamingo, marlin, somersault, tab

Floating formations: paired, group

### **Costumes**

Costumes should be simple to permit freedom of action. A colorful headdress and an oilcloth or plastic tunic over a tank suit are very effective.

### **Music**

Selection: Use record player or tape recorder.

### **Composition**

Composition of a synchronized swimming routine involves: awareness of the relationship between dance and synchronized swimming; design of the swimming routine; balance and harmony; development of the routine on land and in the water; planning entrances and exits.

When synchronized swimming is taught to a group, it is necessary to break the routine into its individual parts, teach each part separately, and then, before combining and practicing in the water, run through the routine on the pool deck. Land drills are of great value to get the feel of the movements and the music. Numbers should be limited to three minutes' duration to prevent fatigue.

In planning routines it is very important to consider the arrangements for the audience. Not all pools have raised balconies along the

length of the pool. Some are at each end so an elaborate floating figure number may be entirely lost if it is improperly placed.

In building a routine, it is advisable to alternate synchronized swimming numbers with still patterns. Simple, well-performed skills are preferable to poorly done, difficult ones. Accentuate the action above water because the average audience does not appreciate difficult underwater figures.

## AQUASHOWS

Simple water carnivals may be arranged, each group performing in one event on the program. A water ballet or pageant can be a school special event, produced through the cooperation of the various school departments, such as the departments of art, music, English, home economics, and physical education.

In planning a water show, pupils of all ability levels may participate. A water show stimulates interest in swimming and provides training in rhythm. It offers an opportunity for self-directed, creative group activities adapted to individual ability.

## SWIM LEADERS

Swim leaders can make a real contribution to the swimming program if they are involved in its planning, conduct, and evaluation. They will then take pride in the results. Leaders must desire the experience, and the experience must be valuable. Frequently, leaders are guided toward choosing the teaching of swimming and physical education as their future profession.

It is very desirable to have a swim leaders-in-training group to attract the incoming junior high school pupils and train them to qualify as leaders. If possible, this club should meet for two consecutive periods per week before or after school. The training period should be one year. The fall semester may be devoted to directions and methods of teaching; the spring semester to lifesaving and synchronized swimming.

The Swim Leaders Club should meet one or two periods a week before or after school to practice swimming strokes, plan programs for play days, senior lifesaving, and water safety aide training. It is this group that plans the program for the leaders-in-training, helps train them, and ultimately admits the group into the Swim Leaders Club.

The Swim Leaders wear distinctive colored swimsuits. On the club meeting day they may wear an appropriate costume.

### **Eligibility Requirements**

Each school should set its own standards to meet its particular needs. These standards should include superior ability in swimming, evidence of good character, good scholastic standing, an interest in fellow pupils, and a desire to teach. Eligibility requirements might specify:

75% scholastic average

80% average in health and physical education

Participation in extra-curricular activities

One year as a leader-in-training

Satisfactory ratings in skills tests

Satisfactory rating in an interview conducted by the governing board  
of the Swim Leaders Club

Satisfactory health record

G.O. membership

Approval of the Department of Health and Physical Education

### **Developing and Maintaining Standards**

Elect officers.

Draw up a constitution and rules governing the operation of the club.

Require members to attend meetings regularly.

Provide incentives for outstanding service:

1. Minor letters

2. Term-end awards for service.

3. ARC Senior and Junior Lifesaving Certification

4. ARC Water Safety Aide Certification

5. Honorable mention on the school's honor list

6. Honorable mention in an assembly program

7. Mention in the school paper

Provide criteria for evaluating the program.

Establish rules of procedure to be followed during assigned period.

Assign definite duties to each leader and leader-in-training, such as supervision of lockers, showers, safety patrol on pool deck, pool check, as well as teaching stations.

Rotate these assignments monthly.

Post the assignments where all can refer to them.

Elect a student coordinator and an alternate each month for each period of the school day to see that the lockers are checked, suits and towels returned to the proper receptacle, and all assignments covered. Satisfactory execution of these duties can count towards certification as water safety aide.

Teach leaders how to keep records.

Plan play days, clinics, theatre parties, and intramurals.

Familiarize teachers of health and physical education with the duties, standards, and ratings used for the swim leaders and leaders-in-training.

Maintain up-to-date bulletin boards.

Prepare publicity, such as posters and news items, for the school paper and the parents' paper.

## PROMOTING INTEREST IN INTRAMURAL PROGRAM

The following measures have proved effective in promoting interest in intramural activities:

Stories and pictures in school publications and bulletin boards throughout the school.

Stories and pictures in local papers.

Progress charts placed so that they can be studied and referred to by the pupils while attending swimming classes and workouts.

Entries of aquatic accomplishments on permanent record of pupil.

# Interscholastic Program: Boys

An interscholastic competitive swimming program provides another stimulating and challenging activity for the physically talented high school boy. Through rigorous training and keen competition in interschool swim meets, the participant develops a higher degree of physical fitness and skill. Furthermore, these competitive activities help competent swimmers prepare for part-time jobs as lifeguards and camp waterfront counselors and for careers as teachers of swimming.

## SCOPE

The four competitive strokes are: butterfly, breaststroke, backstroke, and freestyle. For each stroke, the competitor must learn proper arm and leg action, breathing, turn, and racing start.

The five groups of competitive dives are: front, back, inward, reverse, and twist. For each dive the competitor must learn: how to stand on the board, the approach, the hurdle, lift and execution of the dive, and entry into the water.

## COACHING

Team members are selected on the basis of performance in tryouts. The coach conducts regular workouts throughout the season. The practice sessions include rigorous weight training, isometric exercises, and conditioning exercises. Circuit training and interval training methods have produced outstanding swimmers.

## FACILITIES

*For schools which do not have pools, the common problems are: ob-*

taining permission to use a pool belonging to another agency; availability of pools only at inconvenient hours, after 5:00 P.M.; use of the same pool by two or more teams; excessive time required to travel from the school to the pool. These suggestions may be helpful:

Arrange with neighboring high schools for two teams to practice together or for one team to use the pool from 2:30-4:00 P.M. and the other from 4:00-5:30 P.M.

Check with local community agencies.\*

If the pool is crowded, obtain at least two lanes for the team. These lanes can be used for circle drills, interval drills, kicking drills.

*For schools which have their own pool*, the following problems may occur: slippery diving board; insufficient head space over the diving board; water not deep enough for diving; poor lighting; excessive alum and chlorine content; slippery deck surfaces. These suggestions may help:

Resurface diving board with nonskid material.

Eliminate diving if ceiling is too low or water is not deep enough.

Place markers five feet from the pool ends on each side of the pool.

Instruct the swimmers to rest periodically and to wear goggles while swimming to prevent eye irritation from high alum and chlorine content.

Frequent, thorough cleaning will reduce excessive slipperiness of deck surfaces.

## Equipment and Supplies

Clipboards and pencils  
Diving calculator  
Diving flash cards  
Divers' individual score sheets  
Duties of officials  
Eligibility statements  
Films of swimmers and divers  
Judges' and timers' cards  
Kickboards  
Lane dividers  
Motion picture projector  
Pistol and cartridges (.22 cal.)

Pool pennants  
Pool regulations  
Public address system  
Rule books (N.C.A.A. and A.A.U.)  
Scoring forms  
Starting blocks  
Stopwatches  
Sweat suits  
Swimsuits  
Visual counters  
Water polo goals and ball  
Whistles

\*Appendix, page 59.

## THE COMPETITIVE SWIMMING SEASON

In advance of the season for competitive swimming opens, the coach should take the following steps:

- Arrange competitive schedule. Review home schedules of other sports for possible conflicts to make certain visiting team rooms are available.
- Arrange practice schedule, starting date, and time of daily practice periods.
- Call for swimmers, divers, and student managers.
- Announce that team members report to equipment room for measurement for suits.
- Establish eligibility standards and system for checking athlete's scholastic progress.
- Prepare a list of prospective officials.
- Arrange for publicity.
- Arrange for pool seating facilities such as chairs, benches, tables, bleachers.

## DUAL SWIMMING MEETS

### One Week Before the Meet

Mail postcards to officials.

If meet is away from home, arrange for transportation and check best possible route to other school.

If meet is at home, notify visiting team coach as to best possible route to your school (by train, bus, or auto).

Conduct time trials during practice session to determine entries in events.

Print program.

Notify the visiting coach of arrival time to insure a warmup for his team prior to the start of the meet.

Arrange for spectator participation.

### Day of the Meet

Adjust temperature of pool to 75° F.

Close scum gutter drains and fill pool to scum gutter level.

Test pool lighting and ventilation.

Test springboard and surface for possible defects.

Obtain sharp pencils, 3 x 5 inch cards, rule books, and diving calculator.

Arrange tables, chairs, and benches around pool for officials and competitors.

Set up the scoreboard.

Check equipment (stop watches, pistol, cartridges).

Place racing lanes in position.

## Suggestions for Supervision

In conducting an effective swimming and water safety program, the supervisor has the responsibility of implementing policies, regulations pertaining to the program. The teacher is responsible for selecting, organizing, and teaching activities from the officially approved curriculum bulletin.

In carrying out their functions, it is necessary for both teacher and supervisor to develop a comprehensive plan for the program. They should:

Survey the pool and adjacent areas and set up the necessary safety regulations.

Determine the manner of handling the distribution of suits and towels.

Determine the manner of sterilizing suits and towels.

Indicate the procedures for emergency drills.

Establish procedures for students who cannot participate in the lesson.

Study the curriculum and prepare a plan of instruction for all levels of ability.

Determine class size and manner of assignment from physical education classes.

Set up a schedule if the pool is shared by boys and girls.

Define the policy concerning medical screening.

Specify requirements for graduation.

Confer with custodian to determine allocation of responsibilities with regard to the maintenance and operation of facilities.

Decide the nature and extent of the extracurricular program.

The following *checklist* provides a guide for appraising an effective swimming lesson. Both teacher and supervisor should agree on acceptable standards.

- Are the dressing area and the pool well heated, lighted, and free from any hazards?
- Are specific regulations and signs posted to insure the safe conduct of the students from the dressing area to the pool?
- Are the pupils and the teacher in appropriate costume (teacher in a swim suit and pupils in suits and caps of color indicating level of ability)?
- Is the dressing area properly marked to indicate particular areas of danger?
- Does the pool area meet the required standards for lighting, heating, and cleanliness?
- Is the standard lifesaving equipment accessible and available?
- Is the pool clearly marked as to depth and distance?
- Is the pool clearly marked to indicate areas for different levels of ability?
- Is an area line used to mark off the limit for nonswimmers?

## AIM

Is the ~~aim~~ aim of the lesson clear to the pupils so that they are working consciously toward a specific goal?

Is the aim adapted to the capacities of the group?

Is the aim challenging and worthwhile?

## MOTIVATION

Is the lesson related to an appreciated problem or felt need?

Is the motivation based on natural drives and instincts such as self-mastery, play, etc?

Is the motivation challenging?

## WARMUP

Is the activity sufficiently vigorous and sustained?

## CLASS MANAGEMENT

Do the pupils follow an efficient procedure for receiving suits and towels and using lockers?

Is there an efficient procedure for handling the excused pupil? The

- late pupil? The unprepared pupil?
- Is there a specific allocation of time for dressing or do the pupils move at their own pace?
- Are leaders used effectively?
- Does the organization of the class emphasize pupil responsibility and leadership?
- Does the organization of the class make it possible to achieve the objectives?
- Are the pupils assigned to specific areas of the pool?
- Is there a definite system for checking pupils in and out of the pool as a safety measure?

## **PRESENTATION AND DEVELOPMENT**

- Is the presentation clear?
- Does the lesson follow a logical plan of development from the simple to the complex?
- Is the analysis of movement such that the pupils are left with a clear understanding of its nature?
- Is new material related to previous learning?
- Are all the pupils given opportunity to perform?
- Are illustrative materials used? Do the materials used make learning more real and vital?
- Does the teacher use demonstrations when necessary?

## **REVIEW AND DRILL**

- Is a good model of the skill provided?
- Do the pupils have an opportunity to practice the skill after understanding the outcomes sought?
- Do the pupils have an opportunity to demonstrate what they have learned?
- Is the skill discussed and analyzed by the pupils and the teacher?

## **SUMMARY**

- Does the summary emphasize the highlights of the lesson? Does the summary take the form of a discussion or demonstration?

## **EVALUATION OF THE LESSON**

- Does the teacher provide for continuity of development?
- Is sufficient time allocated to each phase of the lesson?

Is the lesson unified?

Do teachers and pupils evaluate pupil progress?

Are the pupils active enough to prevent chilling?

### **The Teacher**

Is the teacher in appropriate costume?

Does the teacher's manner reflect confidence and poise?

Is the teacher's voice audible in a pool situation?

Is the teacher's manner encouraging?

Does the teacher have good rapport with the pupils?

### **Results**

To what extent have pupils gained new knowledge?

To what extent have pupils developed new skills?

To what extent have pupils developed desirable concepts, attitudes, and appreciations?

# Evaluation of Program

There should be a continuous and systematic process of evaluation by teachers and supervisors of the entire program of swimming and water safety in order to eliminate weaknesses and raise the level of effectiveness of the program.

Evaluating the effectiveness of swimming instruction must be based upon the progress of the pupils towards stated objectives:

Did nonswimmers overcome an initial fear of the water?

Did pupils progress in skill and knowledge after each session? After each teaching unit? After the course?

How many pupils have progressed from:

Nonswimmer classification to ARC Beginner? \_\_\_\_\_

ARC Beginner to ARC Advanced Beginner? \_\_\_\_\_

ARC Advanced Beginner to ARC Intermediate? \_\_\_\_\_

ARC Intermediate to ARC Swimmer? \_\_\_\_\_

ARC Swimmer to ARC Advanced Swimmer? \_\_\_\_\_

ARC Advanced Swimmer to ARC Senior Lifesaver? \_\_\_\_\_

ARC Senior Lifesaver to ARC Water Safety Aide? \_\_\_\_\_

How many pupils have engaged in one or more phases of the intramural or interscholastic program? \_\_\_\_\_

How many talented competitive swimmers have earned college scholarships? \_\_\_\_\_

How many pupils participate in wholesome water sports outside of school?

Boating? \_\_\_\_\_

Canoeing? \_\_\_\_\_

Sailing? \_\_\_\_\_

Water skiing? \_\_\_\_\_

Skin diving \_\_\_\_\_  
Surfing \_\_\_\_\_  
How many pupils were able to secure summer jobs as  
lifeguards and camp waterfront counselors? \_\_\_\_\_  
How many pupils were guided to prepare for careers as  
teachers of swimming? \_\_\_\_\_

Progressive testing should be used as a part of all swimming instruction, particularly for beginners. Graded achievement charts should be posted so that each pupil can see what he has accomplished. Speed timing charts and endurance swimming records should also be posted. The American Red Cross 50 Mile Swim and Stay Fit program with its cumulative chart provides incentive for those pupils who have passed all the other tests but who love to swim with a purpose.

## ACHIEVEMENT STANDARDS

Satisfactory completion of courses in health and physical education is required for graduation from the New York City high schools. In schools with programs of swimming and water safety, satisfactory completion of the course in swimming and water safety is a requirement for passing physical education. Pupils must attain a final grade of at least 65 (satisfactory) in swimming and water safety in order to receive the required credit for physical education. Only pupils with valid medical excuses are exempt from this requirement.

In order to meet the minimum standard of achievement in swimming and water safety, every pupil must pass the ARC Beginner Test. The pupil must be able to jump into deep water feet first, surface, tread water, swim fifteen yards, turn, and start swimming back. Half-way back he must turn on his back and remain motionless or use gentle paddling movements for fifteen seconds. Then he must turn to a front swimming position and swim to the starting point.

### Grading

Grades in swimming should be based on objective tests of skill and knowledge and should reflect pupil progress and achievement in swimming. At the end of the course, the same numerical grades should be used which are used for other subjects in the curriculum: 90-100 (excellent); 80-90 (very good); 70-80 (good); 65-69 (fair); below 65 (unsatisfactory).

The teacher should use the American Red Cross tests for beginner,

advanced beginner, intermediate, swimmer, advanced swimmer, junior, and senior lifesaving and water safety aide.

In addition, careful records should be kept of each pupil's attendance, punctuality, cooperation, and effort. Every pupil should be required to meet satisfactory standards in each of these items. The numerical grade, however, should reflect only *achievement* or proficiency in swimming. If the pupil is unsatisfactory in one or more of the above items, this may be noted on the cumulative health record and the permanent record card.

# Appendix

## AUDIO-VISUAL MATERIAL

### Films

These films may be borrowed free from the local chapter of the American National Red Cross:

Be Water Wise	Oars and Paddles
Boats, Motors, and People	People Afloat
First Aid (Parts I and II)	Skilled Swimming
Fundamentals of Swimming	Small Craft Safety
Heads Up	Swim and Stay Fit
It's Fun to Swim	Teaching Johnny to Swim
Learning How to Swim	You Are the Lifeguard
Midsummer's Nightmare	Your Breath Can Save a Life

The following films, produced by Ryan Film Co., may be borrowed from the Bureau for Health Education:

Sprint Crawl	Breaststroke	Butterfly Stroke
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The following films on the approved list of BAVI may be rented or bought with school funds:

Backstroke .....	International Film Bureau
Beginner Swimming .....	Coronet
Breaststroke .....	International Film Bureau
The Crawl .....	International Film Bureau
Creative Swimming Part I .....	Colburn
Creative Swimming Part II .....	Colburn

The Dolphin Kick .....	Coronet
Let's Be at Home in the Water.....	Newenhouse, Henie, Inc.
Rescue Breathing .....	American Films Productions, Inc.
Springboard Technique .....	Coronet
Swan Dive and Front Jackknife.....	United
Survival Swimming .....	International Film Bureau
Swimming Techniques for Girls.....	Coronet

### Filmstrips

These filmstrips, produced by the Society for Visual Instruction, are on the approved list of the Bureau of Audio-Visual Instruction:

Swimming (Color). Set of four with manual and two records. (33 $\frac{1}{3}$  R.P.M.)

Getting Used to the Water  
Learning to Swim

Elementary Backstroke  
Sidestroke

Diving. Set of three with manual and record (33 $\frac{1}{3}$  R.P.M.)

Elementary Dives

Required Dives

Optional Dives

### BIBLIOGRAPHY

Amateur Athletic Union of the United States. *Swimming; Swimming (Synchronized); Diving; Water Polo*. Official A.A.U. Rule Books and Guides. New York: A.A.U., 1966.

American Association for Health, Physical Education, and Recreation. *Official Aquatics Guide*. (Published annually). Washington, D.C.: The Association, 1966.

American Red Cross. *Instructor's Manual: Survival Swimming*. Washington, D.C.: ARC, 1961.

———. *Instructor's Manual: Swimming and Diving Courses*. Washington, D.C.: ARC, 1961.

———. *Lifesaving and Water Safety*. Garden City, N.Y.: Doubleday, 1956.

———. *Swimming for the Handicapped*. Washington, D.C.: ARC, 1955.

———. *Swimming for the Handicapped: Instructor's Manual*. Washington, D.C.: ARC, 1960.

- . *Teaching Johnny to Swim*. Washington, D.C.: ARC, 1963.
- ARMBRUSTER, DAVID. *Swimming and Diving*. 4th ed. St. Louis: Mosby, 1963.
- BILLINGSLEY, H. S. *Diving Illustrated*. New York: Ronold, 1965.
- Bureau of Community Education. *Swimming Manual, Experimental Edition*. New York: Board of Education, 1964.
- BURKE, LYNN and DON SMITH. *Swimming*. New York: Nelson, Inc. 1962.
- DELLA VALLE, GUSTAVE. *Skin and Scuba*. New York: Sterling, 1961.
- HIGGINS, JOHN F. *Swimming and Diving*. 3d ed. Annapolis: U.S. Naval Institute, 1962.
- JUBA, WILLIAM. *Swimming*. New York: Arco, 1961.
- KAUFFMAN, CAROLYN. *How To Teach Children to Swim*. New York: Putnam, 1960.
- LEIBER, ARTHUR S. *Complete Book of Water Sports*. New York: Coward McCann, 1962.
- MASON, BERNARD S. and E. D. MITCHELL *Aquatic Games and Contests*. New York: Ronald, 1958.
- MACKENZIE, MARLIN and BETTY SPEARS. *Beginning Swimming*. New York: Wadsworth, 1963.
- MORIARTY, PHIL. *Springboard Diving*. New York: Ronald, 1960.
- New York State Department of Health. *Policies Governing the Preparation of Plans for Artificial Swimming Pools, Bulletin 31, Division of Environmental Health Services*. Albany: The Department, 1966.
- PRICE, FERNE E. *Water Ballet Pageants*. New York: Burgess, 1965.
- ROBERTS, FRED M. *Basic Scuba*. New York: Van Nostrand, 1963.
- ROBERTSON, DAVID H. *Competitive Swimming*. New York: Sterling, 1963.
- RYAN, MARILYN. *Learning to Swim Is Fun*. New York: Ronald, 1960.
- SAVA, CHARLES. *How to Teach Yourself and Your Family to Swim Well*. New York: Simon and Schuster, 1960.
- SMITH, HOPE M. *Water Games*. New York: Ronald, 1962.
- SPEARS, BETTY. *Fundamentals of Synchronized Swimming*. Minneapolis: Burgess, 1965.
- Sports Illustrated. *Book of Diving*. New York: Lippincott, 1961.
- Sports Illustrated. *Book of Swimming*. New York: Lippincott, 1961.

# EQUIPMENT AND SUPPLIES

## IN SCHOOL SWIMMING POOLS:

*Only equipment and supplies on approved list should be used. Use of nonlist equipment and supplies is prohibited unless authorized in writing by the Bureau for Health Education.*

### EQUIPMENT

<i>Item</i>	<i>Quantity</i>	<i>Item</i>	<i>Quantity</i>
Area line with buoys	2	Paint, abrasive (gallon)	1
Bulletin board	4	Racing lane	5
Chalkboard (portable)	1	Rescue pole, aluminum	4
Diving board	1	Ring buoy and line	6
Diving board surfacing	1	Shepherd's crook	1
Diving brick	2	Starting block	6
Extension handle	1	Stretcher	1
Line, $\frac{3}{8}$ " (100')	1	Torpedo buoy and line	2
Public address system	1	Water polo nets (pair)	1

### SUPPLIES

<i>Item</i>	<i>Quantity</i>	<i>Item</i>	<i>Quantity</i>
Ball, water polo	2	Rule books (N.C.A.A. and A.A.U.)	2
Blanket	2	Shower curtain	24
Calculator, diving	3	Stopwatch	5
Cap, bathing (boys)	300	Suit, sweat	30
Cap, bathing (girls)	300	Suit, swim (boys)	300
Comparator	1	Suit, swim (girls)	300
First aid kit	1	Swim fin, pair	2
Flash cards, diving, set	2	Swim mask	2
Kick board	30	Towel	300
Orthotolidine (16 oz. btl.)	2	Thermometer, pool	1
Phenol, red (16 oz. btl.)	2	Visual counters	4
Pool pennants	2		
Robe, terry cloth	2		

# LESSON PLAN OUTLINE

Teacher \_\_\_\_\_ Class \_\_\_\_\_

References. *Instructor's Manual: Water Safety, Swimming, and Life-saving Course, ARC.* Reference Pages \_\_\_\_\_

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## Title

Beginners \_\_\_\_\_

Intermediates \_\_\_\_\_

Advanced \_\_\_\_\_

## Aim

Beginners \_\_\_\_\_

Intermediates \_\_\_\_\_

Advanced \_\_\_\_\_

Locker room and shower room \_\_\_\_\_ Minutes

## Warmup

Deck/water \_\_\_\_\_ Minutes

Motivation \_\_\_\_\_ Minutes

Demonstration and explanation \_\_\_\_\_ Minutes

Practice and drill

Summary \_\_\_\_\_ Minutes

Free swim \_\_\_\_\_ Minutes

Locker room (dress) \_\_\_\_\_ Minutes

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## REMARKS:

\_\_\_\_\_

\_\_\_\_\_

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## SELF-CHECK FOR TEACHER

Am I wearing appropriate swimsuit and footwear?

Am I the first to enter and the last to leave the pool area?

Am I in position at all times to observe all pupils in the water?

- Do I make every period a "teaching" period?
- Do I group pupils according to ability?
- Do I use student leaders?
- Do I post and follow weekly and semester teaching plans?
- Do I test students and record results?
- Do I issue ARC certificates?
- Are regulations prominently displayed?
- Do I clear and carefully inspect the pool at the end of each class period?
- Do I keep all doors to the pool area locked when I am not in the pool area?

## REGULATIONS

### Locker Room, Shower Room, and Swimming Pool

- Open and use only the locker assigned to you. Close all open locker doors.
- Use only officially approved school lock. Make sure to lock your locker.
- Do not leave valuables in lockers. Leave valuables at home.
- Only plastic, not glass, containers are permitted.
- Walk, not run, at all times. Horseplay, fighting, running, splashing, pushing are prohibited.
- Dress quickly. Loitering in the locker room is not permitted.
- In case of emergency, fire drill, or air shelter drill, students must follow the directions of the teacher.
- Dry thoroughly after the shower, particularly between the toes.
- Take a shower with soap before entering the pool area.
- Pupils who have any sign or symptom of a contagious or infectious disease are to be excluded. The conditions include: colds, fever, sore throat, eye inflammation, ear discharge, ringworm, athlete's foot, rash, carbuncle, pimples, skin lesions, abrasions, severe sunburn.
- Pupils wearing bandages or dressings of any kind are not admitted.
- Pupils may not enter the pool area if the teacher is not present, even if the door is unlocked.
- If a pupil leaves the pool area, he must take a shower before returning to the pool.

Pupils who have not passed the deep water test must remain in the shallow area.

Practicing breathholding, underwater swimming, or lifesaving skills are prohibited except under the direct supervision of the teacher.

Girls must wear caps in the pool. Jewelry is prohibited.

Pupils wearing street shoes are not permitted on the pool deck.

Food, chewing gum, soft drinks, books, and clothing are not permitted in the pool area.

Urinating, spitting, or blowing the nose in the pool is forbidden.

Diving in the shallow area is prohibited.

Use the diving board only when and as directed by the teacher.

Only one person is permitted on the diving board at one time. Dive only after the previous diver has surfaced and moved to the side of the pool.

Do not swim in the diving area.

Pupils must obey all local school rules for the health and safety of students.

## PUPIL'S SWIMMING SAFETY PLEDGE

School \_\_\_\_\_ Borough \_\_\_\_\_

Swim Section \_\_\_\_\_ Teacher \_\_\_\_\_

This is to certify that I received both verbal and written instruction in safety in the locker room, shower room, and swimming pool areas. I received a copy of the locker room, shower room, and swimming pool rules. I fully understand them and realize that I must obey these rules to protect the health and safety of my classmates and myself.

I PROMISE TO OBSERVE THESE RULES CAREFULLY AND FAITHFULLY

Pupil's Signature \_\_\_\_\_ Official Class \_\_\_\_\_

Witness 1. Signature \_\_\_\_\_ Official Class \_\_\_\_\_

Witness 2. Signature \_\_\_\_\_ Official Class \_\_\_\_\_

Date \_\_\_\_\_ Teacher's Signature \_\_\_\_\_

## SELECTED INDOOR POOLS

### MANHATTAN

#### DEPARTMENT OF PARKS

Baruch, 326 Rivington Street  
Carmine, 83 Carmine Street near Seventh Avenue  
East 23 Street, East 23 Street near Asser Levy Place  
East 54 Street, 342 East 54 Street near First Avenue  
Rutgers Place, 5 Rutgers Place  
West 28 Street, 409 West 28 Street  
West 59 Street, 533 West 59 Street near West End Avenue  
West 134 Street, 34 West 134 Street

#### YMCA — YWCA

Grand Central (M), 224 East 47 Street  
Central (W), 610 Lexington Avenue  
Harlem (M), 180 West 135 Street  
Harlem Annex (M), 181 West 135 Street  
West Side (M), 5 West 63 Street  
West Side (W), 840 Eighth Avenue  
McBurney (M), 215 West 23 Street  
Seamen's House (M), 550 West 20 Street

#### YMHA — YWHA

YMHA, 1393 Lexington Avenue and 92 Street

#### BOYS' CLUBS

Tompkins Square, 280 East 10 Street  
Madison Square, 301 East 29 Street  
Kips Bay, 301 East 52 Street  
Rhineland, 88 Street near First Avenue  
Jefferson Park, 321 East 111 Street

#### MISCELLANEOUS

Adam Clayton Powell Center, 179 West 137 Street  
Association Temporary Care of Children, 1 East 104 Street  
Children's Aid Society, 14 West 118 Street  
Church of All Nations, 9 Second Avenue  
Lenox Hill Neighborhood Association, 331 East 70 Street  
Madison Avenue Presbyterian Church, 921 Madison Avenue  
Salvation Army, 123 West 13 Street

## **BRONX**

### **DEPARTMENT OF PARKS**

St. Mary's, East 145 Street near St. Ann's Avenue

YMCA — YWCA

Bronx Union, 470 East 161 Street

YMHA — YWHA

YMHA, 1130 Grand Concourse

## **BROOKLYN**

### **DEPARTMENT OF PARKS**

Brownsville Boys' Club, 1555 Linden Boulevard

St. John's, 1251 Prospect Place

YMCA — YWCA

Greenpoint (M), 99 Meserole Avenue

Eastern District (M), 179 Marcy Avenue

Bedford (M), 1121 Bedford Avenue

Central (M), 55 Hanson Place

Prospect Park (M), 357 Ninth Street

Judson Post Hall (W), Third Avenue

YMHA — YWHA

YMHA of Boro Park, 4912 - 14 Avenue

YMHA of Williamsburg, 575 Bedford Avenue

YMHA of East New York, 2057 Linden Boulevard

### **BOYS' CLUBS**

Flatbush, 2245 Bedford Avenue

## **MISCELLANEOUS**

B'nai Israel, 1800 Utica Avenue

East Midwood Jewish Center, 1625 Ocean Avenue

Jewish Community Center, 7802 Bay Parkway

Ocean Parkway Jewish Center, 500 Ocean Parkway

Kings Highway Jewish Center, 2902 Kings Highway

Union Temple, 17 Eastern Parkway

Brooklyn Jewish Center, 667 Eastern Parkway

## **QUEENS**

YMCA — YWCA

Flushing, 138-46 Northern Boulevard

Highland Park, 570 Jamaica Avenue  
Central Queens, 89-25 Parsons Boulevard

#### MISCELLANEOUS

Bellerose Jewish Center, 254-14 Union Turnpike  
Boys' Club of Queens, 21-12 30 Road  
Church in the Gardens, 15 Borage Place  
Forest Hills Jewish Center, 106-06 Queens Boulevard  
Hillcrest Youth Center, 183-02 Union Turnpike  
Jewish Center, 150-91 87 Road

#### RICHMOND

YMCA — YWCA  
YMCA Staten Island, 651 Broadway

#### MISCELLANEOUS

Jewish Community Center, 475 Victory Boulevard

### ARC WATER SAFETY MATERIALS

#### AMERICAN RED CROSS IN GREATER NEW YORK

Brooklyn: 1 Red Cross Place, Brooklyn, N.Y. 11201 (SU 7-1000 - Ext. 558)

Central Queens: 90-07 Merrick Boulevard, Jamaica, N.Y. 11432 (SU 7-1000 - Ext. 743)

New York (Man. & Bronx): 150 Amsterdam Ave., N.Y. 10023 (SU 7-1000 - Ext. 302)

Norix Shore: 42-22 Union Street, Flushing, N.Y. 11352 (SU 7-1000 - Ext. 744)

Staten Island: 36 Richmond Terrace, Staten Island, N.Y. 10301 (SU 7-1000 - Ext. 305)

The following materials may be obtained from your local Red Cross chapter:

#### Outlines

Swimming & Life Saving (ARC 1030)  
Water Safety Aide (ARC 1090)  
Survival Swimming (ARC 1059)

Swimmer Aide (ARC 2107 - restricted)  
Swimming for Handicapped (ARC 1092 - restricted)  
Swim & Stay Fit (ARC 2108-B)

## Chart

Nine Styles of Swimming (ARC 1089)

## Skill Sheets

Beginner (1382)  
Advanced Beginner (5319)  
Intermediate (1383)  
Swimmer (1384)  
Advanced Swimmer (1385)  
Water Safety Aide (5068)  
Survival Swimming—Basic (5027)  
" " —Advanced (5028)  
Life Saving—Junior & Senior (1375)  
Swimmer Aide (5310 - restricted)  
Swim & Stay Fit Record (5346)  
" Progress Card (5347)  
" Wall Chart (5348)

## Posters

Artificial Respiration (1002)  
Have Fun—But! (1020)  
Farm Pond Rescue Station (1021)  
Reaching Rescue (1012-A)  
Extension Rescue (1012-B)  
Rowboat Rescue (1012-C)  
Boat Rescue (1013-A)  
Canoe Rescue (1013-B)  
Learn to Swim (1015)  
Read & Heed (1018)  
Small Craft Safety (1019)

## Motion Pictures

Learning How to Swim (16mm.—28 min.)  
Fundamentals of Swimming (16mm.—32 min.)  
Skilled Swimming (16mm.—27 min.)  
It's Fun to Swim (16mm.—12 min.)  
Oars & Paddles (16mm.—24 min.)

**Heads Up** (16mm.—24 min.)  
**Your Breath Can Save a Life** (16mm.—3½ min.)  
**Teaching Johnny to Swim** (16mm.—14½ min.)  
**Boats, Motors & People** (16mm.—13½ min.)  
**Small Craft Safety** (16mm.—12 min.)  
**Swim & Stay Fit** (16mm.—4½ min.)  
**Ice Rescue** (16mm.—14½ min.)

### Textbooks

**Swimming & Diving**—75¢  
**Life Saving & Water Safety**—75¢  
**Teaching Johnny to Swim**—20¢  
**Canoeing**—\$1.25

### Insignia

Instructor Emblem	50¢, Pin	50¢
Senior Emblem	50¢, "	50¢
Junior Emblem	25¢, "	30¢
Water Safety Aide Emblem	10¢	
Advanced Swimmer Emblem	25¢	
Swimmer Emblem	25¢	
Swim & Stay Fit Emblem	50¢, "	85¢ (completed 50-mile swim)

*To the Teacher:* Your examination records when completed should be sent to the local Red Cross chapter in which the organization office is located or where classes are conducted. The chapter will issue the certificates. Any fees for insignia shown on records should be sent to the chapter along with the record forms. All examination record forms should include the names of any instructors or aides who assisted with any part of the instruction.

Water safety instructors holding current certificates authorizing them to conduct courses within the territory of the American Red Cross in Greater New York may secure blank swimming skill certificates in advance from Safety Services for use in organizations, schools, or for camps whose headquarters are located in the Chapter's territory. Unused, mutilated, or duplicated certificates must be returned at the end of the term or season. Test forms must be submitted to the chapter to account for the certificates issued. Send only *ONE* copy—no duplicate is necessary. Use separate forms when reporting senior and junior courses.

Your cooperation in complying with the above will be appreciated as a monthly report is compiled on the swimming and lifesaving activities within the Chapters. We should like to credit all agencies and organizations within the Chapter's jurisdiction that cooperate in our training program to help reduce the drowning loss.

There is a need for volunteer instructors to assist with our swimming and lifesaving program. If you are available, please fill in the enclosed application and return it.

If we can be of assistance to you at any time, please feel free to call on us.